



Federal Communications Commission
Washington, D.C. 20554

October 6, 2014

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Protecting and Promoting the Open Internet*, GN Docket No. 14-28

*Applications of Comcast Corp. and Time Warner Cable Inc. for Consent
To Assign or Transfer Control of Licenses and Authorizations*, MB docket No. 14-57

Dear Ms. Dortch:

On Wednesday, September 10, 2014, the Federal Communications Commission co-hosted a public series of presentations as part of a workshop on "Regulating the Evolving Broadband Infrastructure" with the University of Nebraska College of Law and the American Enterprise Institute.¹ The purpose of the event was to afford FCC staff the opportunity to learn about current academic research. It included keynote presentations by three outside experts—Richard Bennett of the American Enterprise Institute, Mark Cooper of the Consumer Federation of America, and Christopher Yoo, Professor of Law at the University of Pennsylvania.

Abstracts of the three presentations are attached to this letter. The full event, including remarks by FCC staff and by invited discussants and others, was live-streamed and recorded. With this letter, the related video recordings available online at <http://www.fcc.gov/events/regulating-evolving-broadband-ecosystem> are submitted into the docket for the above-captioned proceedings. [The material relevant to MB Docket No. 14-57 is almost entirely contained in the Cooper presentation.]

Respectfully Submitted,

A handwritten signature in blue ink that reads "Jonathan D. Levy".

Jonathan D. Levy
Deputy Chief Economist
Office of Strategic Planning
Federal Communications Commission

¹ See **WORKSHOP ON REGULATING THE EVOLVING BROADBAND ECOSYSTEM AT FCC SEPTEMBER 10-12, 2014**. https://apps.fcc.gov/edocs_public/attachmatch/DOC-329108A1.pdf

ATTACHMENTS

Richard Bennett: “The Comparable Picture-How the G7 Broadband Ecosystem Measures Up”

Abstract

This study evaluates the quality, dynamism, and value of G7 broadband network infrastructures in order to determine how successful they have been. It judges policy success by applying a multi-factor formula including deployment, utilization, performance and financial criteria to a wealth of data on all aspects of G7 broadband. It finds three policy models active in the G7 today:

1. The “Pioneer Model”, used by the U.S. and Canada, that features R&D subsidies, deregulated urban markets, and limited subsidies for rural markets.
2. The “Contingent Model”, used in Japan, Germany, and U.K, that provides open access and price controls over legacy infrastructure while permitting carriers to make profit from advanced infrastructure.
3. The “Utility Model”, used in France and Italy, in which an all-powerful national regulator targets far-off goals with promises of massive subsidies that often fail to materialize.

It finds the Pioneer Model most effective, the Contingent Model is second, and the Utility Model is worst.

Link to Presentation: http://www.aei.org/files/2014/09/12/-bennett-g7-broadband-dynamics_102550448748.pdf

Mark Cooper: “Innovation and market failure in digital communications”

Abstract

In the great debate over regulation of the communications network on which the Internet rides the right and the left are each exactly half right (and, consequently, half wrong). The right is correct to trumpet the important role of entrepreneurship, innovation and private investment in driving the digital revolution; it is dead wrong in denying the critically important role that active public policy played in creating the environment for success and the vital need for active policy to preserve and protect that environment. The left is correct to trumpet the

important role of active policy in creating the environment for success; it is dead wrong to deny the critically important role that the private sector played in developing and deploying digital technologies and must play in continuing to innovate and expand the digital space. progressive capitalism improves productivity and expands output by making markets work better—i.e. reducing market imperfections and barriers that lead to market failure. To design policies to promote the continuing progress of digital communications we must understand the ways in which the combination of public policy and private actions solved imperfections and reduced barriers in the past and recognize the threats that “undisciplined” private or public power pose to the engine of growth. **[Comcast and Open Internet]**

Link to Presentation: http://www.aei.org/files/2014/09/12/-cooper-aei-fcc-presentation_142750591115.pdf

Christopher S. Yoo: “Past Performance Does Not Guarantee Future Results: Towards A Dynamic Theory of Network Architecture and Regulation”

Abstract

During the debate over network neutrality, the Federal Communications Commission has focused policy on preserving what it thought were the determinants of the Internet’s past success. Chief among these determinants is the Internet’s modular architecture. Unfortunately, academic discussions about modularity appearing in the literature on Internet policy are undertheorized. The persistence of non-modular architectures for some technologies underscores the need for some theoretical basis for determining when modularity is the preferred approach. Even when modularity is desirable, theory must provide some basis for making key design decisions, such as the number of modules, the location of the interfaces between the modules, and the information included in those interfaces. Equally importantly, theory must provide some basis for determining when modular change would be optimal as well as heuristics for identifying when those conditions are present. For regulators faced with the challenge of both promoting innovation and curbing activity that harms consumers, the importance of developing some vision of when architectural are natural and beneficial is obvious. The literature on modularity provides an analytical structure for evaluating these issues. It indicates that architecture is determined by the nature of task interdependencies and the variety inherent in the external environment. Moreover, modularity designs interfaces to ensure that modules operate independently, with all information about process that adjacent modules should not take into account being hidden within the module. These insights in turn offer a number of important implications. They mark a return to a more technological vision of vertical integration that deviates from the transaction-cost oriented vision that now dominates the literature. They also reveal how modularity necessarily limits the functionality of any particular architecture. In addition, although the independence fostered by modularity remains one of its primary virtues, it can also create coordination problems in which actors operating within each module optimize based on local conditions in ways that can lead to suboptimal outcomes for the system as a whole. Lastly, like any design hierarchy, modular systems can resist technological change. These insights shed new light on unbundling of telecommunications networks, network neutrality, calls for open APIs,

and clean-slate redesign proposals. In essence, modularity theory underscores that the structure of complex systems is not an immutable natural construct. Instead, architecture is contingent and can evolve in responses to changes in the underlying technology and demand in ways that must be understood. [14-28, 09-191, 10-127 all open Internet??]

Link to Presentation: http://www.aei.org/files/2014/09/12/-yoo-final-fcc_105402876660.pdf